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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

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First Named Inventor	Joseph Bryan Lyles
Art Unit	2115
Examiner Name	Vajirachai Komoi
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ENCLOSURES *(check all that apply)*

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- ☐ Status Letter
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CERTIFICATE OF CORRECTION (one page);
Red-lined copy of page of Patent showing correction (one page).

Remarks

It is believed that no fees are due in this matter. However, if it is determined that fees are due, the Commissioner is authorized to debit Deposit Account No. 210765 for the required fees.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm	SETTER OLLILA LLC		
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Printed Name	Michael J. Setter		
Date	5-2-05	Reg. No.	37,936

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 6,880,093

DATED : Apr. 12, 2005

INVENTOR(S) : Joseph Bryan Lyles

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 6, line 48
replace "consumption of the device is lowered by witching"
with -- consumption of the device is lowered by switching --

MAILING ADDRESS OF SENDER:

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PATENT NO. 6,880,093

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In this embodiment, the first processor **620** is a Motorola's MPC8260, which consumes 2.5 watts. The second processor **630** is an Intel Strong Arm processor SA-**1110** that consumes less than 240 mW in normal mode. The SA-**1110** also has an idle mode and a sleep mode that consumes less power than the normal mode. In another embodiment, a V.32 modem is implemented in the software running on the second processor **620**, a Strong Arm processor. This enables both the processing function and the interface function to be implemented at a power cost of less than one half watt. Those skilled in the art will recognize that the Strong Arm processor may be suitable for the first processor **620** and the second processor **630**. The low power interface **615** is a modem chip configured to support 32Kb/s for voice communications.

In a power outage, additional telephone lines for multiple phones are unnecessary. Also, digital computer connections to computers are unnecessary because the computer has no power. Only one telephone line is needed during a power outage. By switching to a lower power processor and powering down unneeded telephone lines and computer interfaces, the communication device **600** consumes less than 1.5 watts, which is provided through the network line **612**.

FIG. **7** depicts a flowchart of the operation of the communication device **600** with a DSL interface **610** in an example of the invention. FIG. **7** begins in step **700**. In step **702**, the first processor **620** exchanges first communication signals between the network interface **610** and the POTS interface **650** or the Ethernet interface **656**. When the AC power supply **640** and the DC power supply **642** fail, the communication system **600** uses the power from the network link **612**, which is 1.5 watts. The power from the network link **612** is reliable backup power available at the central office of the telecommunications provider. The power control circuitry **660** then detects a low power condition in step **704**. The power control circuitry **660** then generates a power control signal based on the low power condition.

In step **706**, the POTS interface **650** powers down the telephone links **652**–**654** leaving only one telephone line operational based on the power control signal. In step **708**, the Ethernet interface **654** powers down based on the power control signal. In step **710**, the first processor **620** powers down the DSL interface **610** and powers up the low power interface **615** such as a modem chip that supports the 32Kb/s voice communication based on the power control signal. 32Kb/s is the minimum threshold for supporting voice communications. By powering down the DSL interface, power is saved by reducing the amount of digital signal processing. In another embodiment, the first processor **620** modifies the DSL interface **610** to change the rate to 32Kb/s without powering up a secondary low power interface **615**. The second processor **630** changes power modes from a sleep mode to normal mode based on the power control signal in step **712**.

The first processor **620** then transfers control to the second processor **630** based on the power control signal in step **714**. Transferring control may include transferring instructions to be executed by the first processor **620** or transferring temporary data stored or cached by the first processor **620**. The first processor **620** then changes power modes from a normal mode to a sleep mode based on the power control signal in step **716**. The second processor **630** then exchanges second communication signals between the DSL interface **610** and the POTS interface **650** or the Ethernet interface **654**. FIG. **7** ends in step **720**.

Once the power is resumed from the AC power supply **640** or the DC power supply **642**, the power control circuitry **660** detects a high power condition and generates a high power signal. A high power condition is any condition that indicates power is high in the communication device **600** due to power from a power supply. A high power signal is any signal that the power control circuitry **660** generates based on the high power condition to increase the overall power consumption of the communication system **600**.The steps in FIG. **7** are reversed to power up all telephone links, power up the Ethernet interface **656**, transfer control from the second processor to the first processor, and increase the transfer rate of the DSL interface **610**. In another embodiment, the power control circuitry **660** is included within the operation of the first processor **620** and the second processor **630**.

The above-described elements can be comprised of instructions that are stored on storage media. The instructions can be retrieved and executed by a processor. Some examples of instructions are software, program code, and firmware. Some examples of storage media are memory devices, tape, disks, integrated circuits, and servers. The instructions are operational when executed by the processor to direct the processor to operate in accord with the invention. Those skilled in the art are familiar with instructions, processor, and storage media.

Those skilled in the art will appreciate variations of the above-described embodiments that fall within the scope of the invention. As a result, the invention is not limited to the specific examples and illustrations discussed above, but only by the following claims and their equivalents.

What is claimed is:

1. A device comprising:

a network interface configured to exchange communications with a communication network;

a plurality of interfaces configured to exchange communications with a plurality of user devices;

a power supply configured to draw power from a power source external to the device or from the communication network;

power control circuitry configured to detect a loss of power from the power source external to the device;

a first processor connected to the power control circuitry and configured to switch the power supply from the power source external to the device to the communications network when the loss of power is detected;

the processor also configured to switch to a low power mode by lowering the power consumption of the device when the loss of power is detected where the power consumption of the device is lowered by ~~witching~~ switching control of the device from the first processor to a second processor having a lower power consumption than the first processor.

2. The device of claim **1** where the network interface is a digital subscriber line interface.

3. The device of claim **1** where a first one of the plurality of interfaces is an analog telephone interface and where a second one of the plurality of interfaces is a digital computer interface.

4. The device of claim **1** where the power control circuitry is configured to detect a restoration of power from the power source external to the device and the processor is configured to switch from the low power mode to a normal power mode when the restoration of power is detected.

5. The device of claim **1** where the power source external to the device is an AC circuit.

6. The device of claim **1** where the power supplied from the communication network is power supplied by a phone line.